Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (previously presented): A device for implementing video surveillance on an existing coaxial network, wherein the existing coaxial network supports data transmitted over a first carrier signal, a second carrier signal and a plurality of other carrier signals, the device comprising:

a data port for connecting to the existing coaxial network;

a modulator for modulating first digital signals onto the first carrier signal, wherein at least some of said first digital signals representing sensory electrical signals, said modulator electrically coupled to the data port;

a demodulator for demodulating second digital signals off the second carrier signal, said demodulator electrically coupled to the data port;

a memory for storing sensory electrical signals as data;

a video sensor for capturing image frames of a surveillance area and for converting said image frames to video sensory electrical signals;

a motion detector for detecting motion in at least a portion of the surveillance area and issuing a motion indication; and

a video processor for receiving the video sensory electrical signals representative of the image frames and determining which image frames to save in the memory based on receiving a motion indication.

Claim 2 (original): The device recited in claim 1 further comprises:

an output port for outputting at least said plurality of other carrier signals.

Claim 3 (previously presented): The device recited in claim 1, wherein the memory stores a plurality of executable instructions, the device further comprises:

logic circuitry, said logic circuitry operably coupled to said memory for responding to and processing at least some of said plurality of executable instructions.

Claim 4 (original): The device recited in claim 3 further comprises:

an output port for outputting at least said plurality of other carrier signals.

Claim 5 (original): The device recited in claim 4 further comprises:

a second modulator;

a switch, said switch electrically coupled between said data port, said output port, and said second modulator.

Claim 6 (original): The device recited in claim 4 further comprises:

a user interface for converting user interacts to electrical signals, said user interface operably coupled to said logic circuitry.

Claim 7 (original): The device recited in claim 3, wherein said logic circuitry is a central processing unit.

Claim 8 (previously presented): The device recited in claim 1, wherein said first carrier signal operates on a carrier frequency between 0 MHz and 50 MHz.

Claim 9 (original): The device recited in claim 8, wherein said first carrier signal is an upstream data over cable service interface specification (DOCSIS) carrier.

Claim 10 (previously presented): The device recited in claim 1, wherein said second carrier signal operates on a carrier frequency between 500 MHz and 1000 MHz.

Claim 11 (original): The device recited in claim 1, wherein said second carrier signal is a downstream data over cable service interface specification (DOCSIS) carrier.

Claim 12 (original): The device recited in claim 1, wherein at least some of said plurality of other carrier signals operate on carrier frequencies between 50 MHz and 750 MHz.

Claim 13 (canceled)

Claim 14 (previously presented): The device recited in claim 3 further comprises:

a second sensor for receiving second sensory inputs and for converting said second sensory inputs to second sensory electrical signals, wherein said logic circuitry responds to and processes said second sensory electrical signals for controlling said sensory electrical signals.

Claim 15 (canceled)

Claim 16 (previously presented): The device recited in claim 14, wherein the second sensor is the motion detector.

Claim 17 (previously presented): The device recited in claim 5 further comprises:

a tuner for tuning one carrier signal of said plurality of other carrier signals, said tuner coupled to said output port; and

a display for displaying a representation of information on said one carrier signal of the at least said plurality of other carrier signals, said display coupled to said tuner.

Claim 18 (canceled)

Claim 19 (currently amended): A method for implementing video surveillance on an existing coaxial network having a head-end node and a plurality of distribution nodes, wherein the existing coaxial network supports data transmitted over a first carrier signal, a second carrier signal and a plurality of other carrier signals, the method comprising:

connecting a surveillance device to at least some of the plurality of distribution nodes, said surveillance device comprising:

a data port for connecting to the existing coaxial network;

a first modulator for modulating first digital signals onto the first carrier signal, wherein at least some of said first digital signals representing sensory electrical signals, said modulator electrically coupled to the data port;

a first demodulator for demodulating second digital signals off the second carrier signal, said demodulator electrically coupled to the data port;

a memory for storing sensory electrical signals as data;

a video sensor for capturing image frames of a surveillance area and for converting said image frames to video sensory electrical signals;

a motion detector for detecting motion in at least a portion of the surveillance area and issuing a motion indication; and

a video processor for receiving the video sensory electrical signals representative of the image frames from the video sensor and determining which image frames to save as data in the memory based on the motion indication from the motion detector;

connecting a second demodulator to the head-end node, said second demodulator for demodulating the first digital signals off the first carrier signal;

connecting a second modulator to the head-end node, said second modulator for modulating the second digital signals onto the second carrier signal,

capturing a first image frame from the surveillance area;

converting the first captured image frame to video sensory electrical signals;

modulating the video sensory electrical signals representative of the first captured image frame onto the first carrier signal;

transmitting the video sensory electrical signals onto the existing coaxial network;

capturing a second image frame from the surveillance area;

converting the second captured image frame to video sensory electrical signals;

receiving a motion indication; and

saving the second captured image frame to the memory.

capturing a third image frame from the surveillance area;

converting the third captured image frame to video sensory electrical signals;

receiving a second motion indication; and

saving the third captured image frame to the memory.

Claim 20 (original): The method recited in claim 19 further comprises:

connecting a network server to the second modulator and the second demodulator at the head-end node.

Claim 21 (previously presented): The method recited in claim 19, wherein the motion detector is incorporated in the video processor and the video processor compares image frames for changes indicating the presence of motion between capture of the image frames, the method further comprises:

comparing the second captured image frame to the first captured image frame for changes indicating the presence of motion in the surveillance area; and

issuing a motion indication.

Claim 22 (currently amended): The method recited in claim 21, wherein issuing a motion indication **from** comparing the second captured image frame to the first captured image frame for change between the second captured image frame and the first captured image frame further comprises:

measuring an amount of change between the second captured image frame and the first captured image frame; and

comparing the measured amount of change to a predetermined threshold amount of change.

Claim 23 (previously presented): The method recited in claim 19, wherein the motion detector is incorporated in the video processor and the video processor analyzes a first portion of an image frame for changes and disregards a second portion of the image frame, the method further comprises:

comparing a portion of the second captured image frame to a corresponding portion of the first captured image frame for changes between the images frames in the portion of the captured image frames indicating the presence of motion in the surveillance area; and

issuing a motion indication.

Claim 24 (previously presented): The method recited in claim 19, the method further comprises:

receiving a transmission error for the video sensory electrical signals; and

saving the first captured Image frame to the memory.

Claim 25 (previously presented): The device recited in claim 1, wherein the motion detector is incorporated in the video processor and the video processor compares image frames for changes indicating the presence of motion in the surveillance area between capture of the image frames.

Claim 26 (previously presented): The device recited in claim 25, wherein the video processor analyzes a first portion of image frames for changes and disregards a second portion of the image frames.

Claim 27 (previously presented): The device recited in claim 25, wherein the video processor selects at least some image frames for discarding based on the comparison of image frames for changes.

Claim 28 (previously presented): The device recited in claim 25, wherein the video processor selects at least some image frames for storage in the memory based on an amount of change detected between a current frame and a previous image frame being above a predetermined threshold amount of change.

Claim 29 (previously presented): The device recited in claim 1, wherein the video processor is one of a physical component residing in the device, a physical component residing in the video sensor and video processing executable instructions residing in the memory for processing by the logic circuitry.

Claim 30 (previously presented): The device recited in claim 1, further comprises:

an RFID reader for reading RF tags.

Claim 31 (previously presented): The device recited in claim 1, further comprises:

a universal serial bus port.

Claim 32 (previously presented): The device recited in claim 1, further comprises:

a wireless access point for sending and receiving wireless signals.

Claim 33 (currently amended): The device recited in claim 32 ~~31~~, wherein the wireless access point is compliant with one of IEEE 802.11, Wireless Personal Area Network (WPAN), Bluetooth, HOME Radio Frequency (HomeRF) and HIPERLAN standards.

Claim 34 (previously presented): The device recited in claim 1, further comprises:

an infrared (IR) sensor for receiving infrared signals.

Claim 35 (previously presented): The device recited in claim 1, further comprises:

a remote user interface for receiving user commands.

Claim 36 (previously presented): The device recited in claim 35, wherein the remote user interface further comprises a "PRIVACY" key for disabling the video sensor.

Claim 37 (previously presented): The device recited in claim 1, further comprises:

a medical monitoring device port.

Claim 38 (previously presented): The device recited in claim 1, further comprises:

one of an RF output port, video output port and audio output port.

Claim 39 (previously presented): The device recited in claim 1, further comprises:

a data bus for carrying video information coupled between the video sensor, said data bus being compliant with one of a digital video standard, NTSC video standard,

Agile RF NTSC standard, RF Agile digital video standard, DSL telephone standard and USB standard.

Claim 40 (previously presented): The device recited in claim 1, wherein the video sensor further comprises:

a quasi night vision sensor for operating in low light.

Claim 41 (currently amended): A system for implementing video surveillance on an existing coaxial network, comprising:

a coaxial network;

a plurality of a surveillance control devices coupled to the coaxial network, each control device comprising:

a data port for connecting to the coaxial network;

a modulator for modulating first digital signals onto the first carrier signal, wherein at least some of said first digital signals representing sensory electrical signals, said modulator electrically coupled to the data port;

a demodulator for demodulating second digital signals off the second carrier signal, said demodulator electrically coupled to the data port;

a memory for storing sensory electrical signals as data;

a video sensor for capturing image frames of a surveillance area and for converting said image frames to video sensory electrical signals;

a motion detector for detecting motion in at least a portion of the surveillance area and issuing a motion indication; and

a video processor for receiving the video sensory electrical signals representative of the image frames from the video sensor and determining which

image frames to save as data in the memory based on the motion indication from the motion detector;

a monitor control device coupled to the coaxial network, comprising:

a **second** data port for connecting to the coaxial network;

one of an RF output port and a video output port;

a **second** modulator electrically coupled to the **second** data port for modulating first digital signals onto the first carrier signal;

a **second** demodulator electrically coupled to the **second** data port for demodulating second digital signals off the second carrier signal;

a **second** memory; and

a video monitor coupled to the one of an RF output port and a video output port; and

a head-end, comprising:

a cable modem termination system for receiving first digital signals on the first carrier signal and transmitting second digital signals on the second carrier signal; and

a temporary storage for storing image frames of a surveillance area.

Claim 42 (previously presented): The system recited in claim 41, wherein the motion detector in each of the plurality of surveillance control devices is incorporated in the respective video processor and the video processor compares image frames for changes indicating the presence of motion in the surveillance area between capture of the image frames.

Claim 43 (previously presented): The system recited in claim 42, wherein the video processor analyzes a first portion of an image frame for changes and disregards a second portion of the image frame.

Claim 44 (previously presented): The system recited in claim 42, wherein the video processor selects at least some image frames for discarding based on the comparison of image frames for changes.

Claim 45 (previously presented): The system recited in claim 42, wherein the video processor selects at least some image frames for storage in the memory based on an amount of change detected between a current frame and a previous frame being above a predetermined threshold amount of change.

Claim 46 (currently amended): The system recited in claim 41, wherein the video processor ~~detector~~ in each of the plurality of surveillance control devices is one of a physical component residing in the device, a physical component residing in the video sensor and video processing executable instructions residing in the memory for processing by the logic circuitry.

Claim 47 (previously presented): The system recited in claim 41, wherein each of the plurality of surveillance control devices further comprises an RFID reader for reading RF tags.

Claim 48 (previously presented): The system recited in claim 41, wherein the video sensor in each of the plurality of surveillance control devices is a quasi night vision sensor for operating in low light.

Claim 49 (previously presented): The system recited in claim 41, wherein each of the plurality of surveillance control devices further comprises a medical monitoring device port.

Claim 50 (previously presented): The system recited in claim 41, wherein each of the plurality of surveillance control devices further comprises a wireless access point for sending and receiving wireless signals.

Claim 51 (previously presented): The system recited in claim 50, wherein the wireless access point is compliant with one of IEEE 802.11, Wireless Personal Area Network (WPAN), Bluetooth, HOME Radio Frequency (HomeRF) and HIPERLAN standards.

Claim 52 (previously presented): The system recited in claim 41, wherein each of the plurality of surveillance control devices further comprises a remote user interface for receiving user commands.

Claim 53 (previously presented): The system recited in claim 52, wherein the remote user interface further comprises a "PRIVACY" key for disabling the video sensor.